State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-249

Relating to Certification of New Heavy-Duty Engines and Vehicles

CUMMINS ENGINE COMPANY, INC.

Pursuant to the authority vested in the Air Resources Board at Sections 43100, 43101, and 43102 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned at Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9; and

Pursuant to the December 15, 1998 Settlement Agreement between the Air Resources Board and Cummins Engine Company, Inc. and any modifications to the Settlement Agreement;

IT IS ORDERED AND RESOLVED: That the following 2000 model-year Cummins Engine Company, Inc. diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle-weight-rating (GVWR) over 14,000 pounds:

Fuel Type: Diesel

Engine Family	Displacement <u>Liters Cubic Inches</u>		Exhaust Emission Control Systems and Special Features	
YCEXH0359BA0 (403U)	5.9	359	Powertrain Control Module Turbocharger Charge Air Cooler	

The engine models and codes are listed on attachments.

BE IT ORDERED AND RESOLVED: That the following are the certification exhaust emission standards for this engine family in grams per brake horsepower-hour under the Federal Test Procedure ("FTP") for Heavy-Duty Diesel Engines (Title 13, California Code of Regulations, Section 1956.8):

	Total	Carbon	Nitrogen	Particulate
	Hydr <u>ocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	<u>Matter</u>
"FTP"	1.3	15.5	4.0	0.10

BE IT FURTHER RESOLVED: That pursuant to the Settlement Agreement and any modifications thereof, the aforementioned engine family is also subject to the following emission standards, in grams per brake horsepower-hour, under the EURO III tests in the Settlement Agreement, and a "Not-to-Exceed" nitrogen oxides emission standard of 5.0 grams per brake horsepower-hour:

	Total	Carbon	Nitrogen	Particulate
	Hydr <u>ocarbons</u>	<u>Monoxide</u>	Oxides	<u>Matter</u>
"EURO III"	1.3	15.5	4.0	0.10

BE IT FURTHER RESOLVED: That the following are the certification exhaust emission values for this engine family in grams per brake horsepower-hour:

	Total	Carbon	Nitrogen	Particulate
	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	<u>Matter</u>
"FTP"	0.1	0.9	3.9	0.10
"EURO III"	0.02	0.5	3.5	0.08

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Sections 2035 et seq.).

BE IT FURTHER RESOLVED: That the aforementioned engine family has been conditionally certified subject to the following conditions:

The Settlement Agreement is in effect. 1.

The Settlement Agreement has not become null and void under 2. Settlement Agreement Paragraph 165.

Cummins Engine Co., Inc. is in compliance with all 3. applicable certification requirements of the Settlement Agreement.

Engines certified under this Executive Order must conform to all applicable California emission regulations and to all applicable terms and conditions of the Settlement Agreement.

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this 18 day of June 1999.

R. B. Summerfield, Chief

Mobile Source Operations Division

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Cummins Engine Company, Inc. Manufacturer:

On-highway HDDE Engine category:

YCEXH0359BAO EPA Engine Family.

403U Mfr Family Name:

New Submission

Process Code:

	4				- 2
8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930	69 PCM, TC, CAC	5			
9.Emissic Device Per	PCM, T				The state of the s
8.Fuel Rate: /hr)@peak torque	60	2			
8.Fuel (lbs/hr)@p					
7.Fuel Rate: mm/stroke@peak torque	128	114			
7.Fue mm/stro tot			The state of the s		A Comment of the second
6.Torque @ RPM		550@1900	and a second confidence of the second confiden	All the second second	
	099	550	The state of the s		
5.Fuel Rate: (lbs/hr) @ peak HP	(for diesels Olly)	97			
5.Fu ((bs/hr)	1.38				
4.Fuel Rate: mm/stroke @ peak HP	(for diesel only)	115	A Company of the Comp		
4.Fue mπ/stroke	(for die				
MdB@dHo c	(SAE Gross)	275@2400 260@2500			
0	(SAE	275(260(
	ne Model	ISB 275 ISB 260			
	1.Engine Code 2.Engine Model	2682;FR90656 ISB 275 275@2400 2682;FR90719 ISB 260 260@2500			
	ne Code	2682;FR90656- 2682;FR90719			
	1.Engi	2682;F 2682;F			10 K

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